CATGAAGGTTCCTCCTGTCCTGCTTCTCTTTCTTCTGTCCTCAGTGCGAGCTACTGAGCAACCGCAGGTCG ACTTTCTCTGACTGGCAGAACTTCGTGGGCAGGAGACGTTATGGGGCCGAGTCCCAGAACCCCACGGTGAA AGCACTGCTCATCGTGGCCTACTCATTCACCATCGTCTTCTCGCTCTTCGGTAATGTCCTGGTCTGTCATG TCATCTTCAAGAACCAGCGCATGCACTCGGCCACCAGCCTCTTCATTGTCAACCTGGCAGTGGCGGACATC ATGATCACATTGCTCAACACGCCCTTCACTTTGGTCCGCTTTGTGAACAGCACATGGGTGTTTGGGAAGGG CATGTGTCATGTCAGTCGCTTTGCTCAGTACTGTTCTCTACATGTCTCAGCACTGACTCTGACAGCTATCG CAGTGGACCGCCACCAGGTCATCATGCATCCACTGAAGCCTCGGATCTCCATCACCAAGGGTGTCATATAT CAAGTACAGTGAGGACATTGTGCGCTCCCTCTGCCTGCCGGACTTCCCGGAGCCAGCTGACCTCTTCTGGA CGTGTGGCCAAGAAGCTGTGGCTCTGTAACACCATTGGCGACGTGACCACAGAGCAGTACCTCGCCCTGCG ACGCAAGAAGACCACCGTGAAGATGCTGGTGCTTGTGGTAGTCCTCTTTTGCCCTCTGCTGGTTCCCTC TCAACTGCTATGTCCTCTTTGTCCAGCAAGGCCATCCACCAACAATGCCCTCTACTTTGCCTTCCAC TGGTTTGCCATGAGCAGTACTTGTTATAACCCCTTCATCTACTGCTGGCTCAATGAGAACTTTAGGGTTGA GCTTAAGGCATTGCTGAGCATGTGCCAAAGGCCACCCAAGCCGCAGGAAGACAGGCTACCCTCCCCAGTTC $\tt CTTCCTTCAGGGTGGCATGGACAGAGAGAGCCATGGTCGGAGGGCTCCACTACCTAATCACCACTTGCCC$ TCTTCCCAGATCCAGTCTGGGAAGACAGATCTGTCATCTGTGGAACCCGTTGTGGCCATGAGTTAGGGAAA GCTGGAAGTTGGTGGGGGGGGTTCTTTCCTCTCACAATTGACCAGACACTAACAGAGTTGGAAAGTAACA CAGAAGCAGTGAGATGCTTGGGTTCCTAGGAACCTGTCCAGCCCCATCTGATTTGCAAACTTTCTAGAAGA TGCCATGAGGTGTGTGTAGATCTTTGAGCAAGAGCTCTGGAAACCACCTCAGCTTCAACAGAGGCTGG TCCAGTCAACCACCTCCAATTGTGTAGCATCTGCCACCTTGCCCTTCCTACTGCTGAGCAACCACAGGGGG ACTTGAGCCATACTATTGGTGGGCCTGCCCCACATGCTCAGAAAAGAACAGGCACAAAGGCTTTCTGAAGT CATTGGAACAGGAATAATCACACAGCTTCAGTGACCTTGGCTCTATCCATGACCAGACAGGACCCATTTTG GCTTCTTAAAAACAAAGAGAAATTAGTATTGCCACTTTGAAAAGTTCAGAAAAGTAAAGAAATGAGTTCAG TAAATTTATCTGTAGCTTTGCCTTCTGTGTGTGTACATTTGTACTTTTAAAATCCTGAACTACACGTGTCC ATGTAGATTGTAATAATTAGCAAGAAACTGGAATATATCAGAGTATTATTGAATTC (SEQ ID NO:1)

MKVPPVLLLFLLSSVRATEQPQVVTEHPSMEAALTGPNASSHFWANYTFSDWQNFVGRRRYGAESQNPTVK ALLIVAYSFTIVFSLFGNVLVCHVIFKNQRMHSATSLFIVNLAVADIMITLLNTPFTLVRFVNSTWVFGKG MCHVSRFAQYCSLHVSALTLTAIAVDRHQVIMHPLKPRISITKGVIYIAVIWVMATFFSLPHAICQKLFTF KYSEDIVRSLCLPDFPEPADLFWKYLDLATFILLYLLPLFIISVAYARVAKKLWLCNTIGDVTTEQYLALR RKKKTTVKMLVLVVVLFALCWFPLNCYVLLLSSKAIHTNNALYFAFHWFAMSSTCYNPFIYCWLNENFRVE LKALLSMCQRPPKPQEDRLPSPVPSFRVAWTEKSHGRRAPLPNHHLPSSQIQSGKTDLSSVEPVVAMS (SEO ID NO:2)

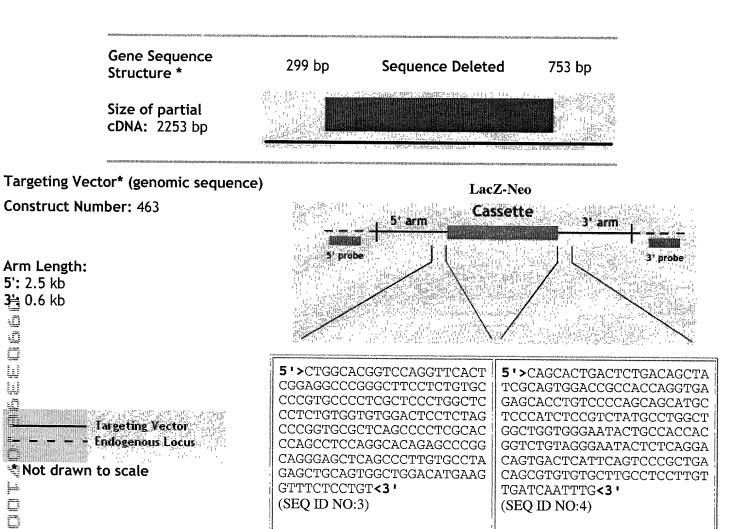
Figure 1

<u>Underlined</u> = deleted in targeting construct

Bold = sequence flanking Neo insert in targeting construct

GGGGTGGCAGTCGGCATCAGGCTCCCTTGGCGTTTCGGAGTTTTCTCTGTGGTCCCG ACTCTCCGGAGGATCTCGGTTGTCTCCCAAGTCGGAACCTGGCACGGTCCAGGTTCACTC GGAGGTCCGGGCTTCCTCTGTGCCCCGTGCCCCTCGCTCCCAGGCTCCCTCTGTGGTGTG GACTCCTCTAGCCCGGTGCGCTCAGCCCCTCGCACCCAGCCTCCAGGCACAGAGCCCGGC $\textbf{AGGGAGCTCAGCCCTTGTGCCTAGAGCTGCAGTGGCTGGACATGAAGGTTCCTCCTGT}\underline{\textbf{CC}}$ $\overline{ ext{TGCTTCTTTTCTTGTCCTCAGTGCGAGCTACTGAGCAACCGCAGGTCGTCACTGAGC}}$ ${f ATCCCAGCATGGAGGCAGCCCTGACCGGGCCCAACGCCTCCTCGCACTTCTGGGCCAACT}$ ${f ACACTTTCTCTGACTGGCAGAACTTCGTGGGCAGGAGACGTTATGGGGCCGAGTCCCAGA}$ ${ t ACCCCACGGTGAAAGCACTGCTCATCGTGGCCTACTCATTCACCATCGTCTTCTCGCTCT}$ ${ t TCGGTAATGTCCTGGTCTGTCATGTCATCTTCAAGAACCAGCGCATGCACTCGGCCACCA}$ <u>GCCTCTTCATTGTCAACCTGGCAGTGGCGGACATCATGATCACATTGCTCAACACGCCCT</u> ${f TCACTTTGGTCCGCTTTGTGAACAGCACATGGGTGTTTGGGAAGGGCATGTGTCA$ <u>GTCGCTTTGCTCAGTACTGTTCTCTACATGTCT</u>CAGCACTGACTCTGACAGCTATCGCAG TGGACCGCCACCAGGTCATCATGCATCCACTGAAGCCTCGGATCTCCATCACCAAGGGTG TCATATATTGCTGTCATCTGGGTCATGGCTACCTTCTTCTCTCTGCCACATGCCATCT ACTTCCCGGAGCCAGCTGACCTCTTCTGGAAGTATCTGGACCTGGCCACCTTCATCCTGC TCTACCTACTTCCACTCTTCATTATCTCAGTGGCCTATGCTCGTGTGGCCAAGAAGCTGT GGCTCTGTAACACCATTGGCGACGTGACCACAGAGCAGTACCTCGCCCTGCGACGCAAGA AGAAGACCACCGTGAAGATGCTGGTGCTTGTGGTAGTCCTCTTTTGCCCTCTGCTGGTTCC $\tt CTCTCAACTGCTATGTCCTCTTGTCCAGCAAGGCCATCCACACCAACAATGCCCTCT$ ACTTTGCCTTCCACTGGTTTGCCATGAGCAGTACTTGTTATAACCCCTTCATCTACTGCT GGCTCAATGAGAACTTTAGGGTTGAGCTTAAGGCATTGCTGAGCATGTGCCAAAGGCCAC CCAAGCCGCAGGAAGACAGGCTACCCTCCCCAGTTCCTTCAGGGTGGCATGGACAG AGAAGAGCCATGGTCGGAGGGCTCCACTACCTAATCACCACTTGCCCTCTTCCCAGATCC AGTCTGGGAAGACAGATCTGTCATCTGTGGAACCCGTTGTGGCCATGAGTTAGGGAAAGC $\tt TGGAAGTTGGTGGGGGGGGGTTCTTTCCTCTCACAATTGACCAGACACTAACAGAGTTGG$ AAAGTAACACAGAAGCAGTGAGATGCTTGGGTTCCTAGGAACCTGTCCAGCCCCATCTGA TGGAAACCACCTCAGCTTCAACAGAGGCTGGTCCAGTCAACCACCTCCAATTGTGTAGCA TCTGCCACCTTGCCCTACTGCTGAGCAACCACAGGGGGACTTGAGCCATACTATTG GTGGGCCTGCCCCACATGCTCAGAAAAGAACAGGCACAAAGGCTTTCTGAAGTCATTGGA ACAGGAATAATCACACAGCTTCAGTGACCTTGGCTCTATCCATGACCAGACAGGACCCAT TTTGGCTTCTTAAAAACAAAGAGAAATTAGTATTGCCACTTTGAAAAGTTCAGAAAAGTA ACATTTGTACTTTTAAAATCCTGAACTACACGTGTCCATGTAGATTGTAATAATTAGCAA GAAACTGGAATATATCAGAGTATTATTGAATTC

Figure 2A



from the limit that the

Figure 2B